



## Los Alamos National Laboratory Technology Transfer Efforts Aid U.S. Competitiveness *Over Sixty Years of Innovation*

The Los Alamos National Laboratory Technology Transfer Division is responsible for licensing technologies invented at the Laboratory to help U.S. companies increase their competitive capabilities.

Technology transfer is an important, congressionally mandated part of the Laboratory's mission. Los Alamos innovators have continually demonstrated that the Laboratory's world-class scientific achievements serve the nation and strengthen economic security by enhancing U.S. industrial competitiveness. The Laboratory's proven reputation for excellence—earned with more than 60 years of scientific contributions to the nation—continues to demonstrate its exceptional work in multiple disciplines to meet the challenges of a rapidly changing world. This work finds application in national security, the Laboratory's primary mission, as well as in commercial products that result from technology innovation.

The efforts of Los Alamos staff to engage in technology transfer activities not only help the Laboratory attract new employees, program sponsors, and collaborators, but they also help the Laboratory comply with its contractual requirements. These activities contribute to the accomplishment of the programmatic mission while supporting continued scientific leadership.

### **Why does Los Alamos license technology to the private sector?**

The Laboratory's mission is to help ensure the nation's security. A large component of that security is the ability of U.S. firms to stay competitive in the global marketplace. U.S. industry benefits from the sharing of skills, knowledge, and technologies invented at Los Alamos. The greatest commercial benefit can be achieved from these technologies when the Laboratory's intellectual property is protected so that it can be licensed to an industry partner.

### **Does Los Alamos compete with industry?**

No. Los Alamos is a multi-disciplinary scientific research institution that benefits all Americans. Technology invented at Los Alamos is an essential component of our national security. Many commercial applications continue to be developed by industry. The Laboratory brings to bear unique facilities and personnel to solve problems of global significance. Industry develops products from many of the resulting innovations.

### **What authorizes Los Alamos to license technology created with public funds?**

The Laboratory's Licensing Program is authorized by the Stevenson-Wydler Technology Innovation Act of 1980 and 35 USC §202 and Appendix N, "Technology Commercialization," of the operating contract DE-AC52-06NA253967 between the Los Alamos National Security LLC and the U.S. Department of Energy.

### **Does Los Alamos charge for licensing its technologies?**

Yes, if they will be used for commercial development. Many of the scientific innovations developed at Los Alamos are published in scientific literature or otherwise freely available to all



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# Technology Transfer Division



For more information regarding  
Technology Transfer, please telephone  
505-665-9090 or visit us on the Web at  
[www.lanl.gov/partnerships](http://www.lanl.gov/partnerships)



via the Los Alamos National Laboratory Web site ([www.lanl.gov/worldview](http://www.lanl.gov/worldview) and [www.lanl.gov/orgs/tt/license/](http://www.lanl.gov/orgs/tt/license/)). Select inventions that have a global commercial potential are licensed in an award fashion to companies best suited to turn these technologies into products. In this case, royalties or licensing fees are negotiated in order to reflect the value of the intellectual property and to contribute to the commercialization effort. Other inventions and software applications developed at the Laboratory, which have value as research tools, are licensed by universities and nonprofit organizations for a fee.

## **How successful is the intellectual property licensing program?**

Los Alamos has generated hundreds of licenses over the past decade. Technology licensees run the gamut from very large, multi-national firms to regional startups, to university and other not-for-profit entities. License types vary from noncommercial site licenses to exclusive commercial licenses.

## **What criteria are used in awarding a commercialization license?**

The Technology Transfer Division at Los Alamos awards licenses to companies that can demonstrate their capability to bring an invention to the marketplace in a timely manner. In selecting a licensee, Technology Transfer may consider criteria such as whether the potential licensee

- has or can secure the technical resources to develop and move the invention to the marketplace in a timely manner;
- has or can arrange adequate financing of any research or product development required to advance the invention to a marketable condition;
- has a general business plan that supports the commercialization of the invention;
- possesses a strong desire and commitment to make the product/technology a success;
- has staff with an understanding of the invention to help ensure successful technical development and commercialization.

## **Can industry collaborate with Laboratory staff to solve specific problems and develop specific products?**

Yes. The Laboratory has a long and very successful history of working with industry. The mechanisms include cooperative research and development programs (CRADAs), user facility opportunities that allow industry to use unique Laboratory facilities and equipment, Work for Others programs, personnel exchange, and an Industrial Fellow program that permits industry staff to work at Los Alamos or Los Alamos staff to work in industry for limited time periods.

## **Does that mean the resulting intellectual property falls into the public domain?**

No. The interests of the collaborating company are the primary concern. The Laboratory will protect most resulting inventions, securing the rights to the IP and licensing the IP to the collaborating company.

## **Who has worked with and/or licensed technology from Los Alamos in the past?**

Hundreds of firms have partnered with Los Alamos from nearly every industry sector. Examples include Chevron, Procter & Gamble, DuPont, LizardTech, Pharmacia & Upjohn AB, SmithKline Beecham, HYTEC, Inc., Motorola, Dow Chemical, Hewlett-Packard, Cray, IBM, Intel, and hundreds of other commercial firms.

## **In what areas of science does the Lab specialize?**

Los Alamos is a multi-program laboratory with expertise in nearly every scientific discipline, including physics, traditional and alternative energy, computer science, materials science, chemistry, nanotechnology, biology, engineering, and mathematics.

# Technology Transfer Division

## About Los Alamos National Laboratory

From its origins as a secret Manhattan Project laboratory, Los Alamos has attracted world-class scientists and applied their energy and creativity to solving the nation's most challenging problems. That tradition remains today. As one of the U.S. Department of Energy's multi-program, multi-disciplinary research laboratories, Los Alamos thrives on having the best people doing the best science to solve problems of global importance.

The University of California, operator of the Laboratory for the U.S. government from its inception through May 31, 2006, continues to maintain a strong connection with the Laboratory as one of four partners comprising Los Alamos National Security LLC, the new operator of the Laboratory. The University has contributed significantly to the scientific quality of the Laboratory's work and technical staff bringing its tradition of world-class science—imprinted by its first director, physicist J. Robert Oppenheimer—to bear on the Laboratory's creativity and innovation, sustaining a rich variety of research programs that directly and indirectly support the Laboratory's basic mission of maintaining the nation's nuclear stockpile. As a national research laboratory, success depends on remaining at the forefront of multi-disciplinary and robust science.

The Laboratory's ability to remain at the leading edge of discovery in science and technology is enhanced by ongoing collaborations with industry, academia, and other laboratories. Laboratory-industry partnerships bolster the U.S. economy and increase the nation's global competitiveness.

As one of the largest employers in Northern New Mexico, the Laboratory employs over 12,500 people—8,500 LANS personnel, more than 3,300 contractor personnel, and approximately 700 postdoc and student personnel—with an annual budget of \$2.2 billion. With its salary and benefits, statewide procurements, and community development programs, the Laboratory represents significant economic impact for the region and the state. Approximately one-third of the Laboratory's technical staff members are physicists, one-fourth are engineers, one-sixth are chemists and materials scientists, and the remainder work in mathematics and computational science, biological science, geoscience, and other scientific disciplines. Professional scientists and students come to Los Alamos from all over the world as staff and visitors to participate in scientific projects.